Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

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DPM 533

IDENTITY *(As Used on Label and List)*	*Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*
Methylene Chloride	

Section I

Manufacturer's Name Dow Chemical USA	Emergency Telephone Number
Address *(Number, Street, City, State, and ZIP Code)*	Telephone Number for Information (517) 636-4400
Midland, MI 48640	Date Prepared November 20, 1986
	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Methylene Chloride	500 ppm	100 ppm		
		changed 50ppm	Ceiling - 1000 ppm	
			Peak - 2000 ppm	
			(5min/2hr)	

Synonym: DCM, Dichloromethane, methane dichloride, methylene bichloride, methylene dichloride

CAS registry no: 75-09-2

RTECS accession no: PA8050000

IMCO/United Nations designation: 90/1593

Molecular weight: 84.93

Molecular formula: CH_2Cl_2

Section III — Physical/Chemical Characteristics

Boiling Point 40.1°C at 760 mmHg		Specific Gravity (H_2O = 1) 1.236 at 20°C	
Vapor Pressure (mm Hg.) 340 mm Hg at 20°C (high!)		Melting Point -96.7°C at 760 mm Hg	
Vapor Density (AIR = 1) 2.93		Evaporation Rate (Butyl Acetate = 1) Not available	

Solubility in Water
2.0g/100g of water at 25°C

Appearance and Odor
Colorless liquid with ether-like odor, threshold 300 ppm

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
none	in air 13 -23%	13%	23%

Extinguishing Media
Carbon dioxide or dry chemical, foam, water fog

Special Fire Fighting Procedures
Self-contained breathing apparatus w/ full facepiece and operated in pressure-demand or other positive pressure mode

Unusual Fire and Explosion Hazards
Poisonous gases are produced when heated. Lower temperatures increase the difficulty of getting it to ignite.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable	X	Hydroysis producing small amounts of hydrochloric acid
	Stable		possible with gross water contamination

Incompatibility (*Materials to Avoid*)
aluminun, sodium, potassium, and magnesium

Hazardous Decomposition or Byproducts
highly toxic fumes of phosgene and chlorine

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	No

Health Hazards (*Acute and Chronic*)
acute: anesthetic, inhalation; mental confusion, light-headedness, nausea, vomiting, and tingling or numbness of extremities, liquid; irritation to shin and eyes

chronic: increased light headedness, staggering, unconsciousness, and death

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	can not be supported		

not believed to poss carinogenicity, mutagenicity, or teratogenciy to humans, animals studies indefinite.

Signs and Symptoms of Exposure
chemical anoxia (metabolic conversion of CO), irritability, fatique, weak, vertigo, sleepy, and dizziness

Medical Conditions
Generally Aggravated by Exposure
anemias or cardiovascular diseases

Emergency and First Aid Procedures
(eye:) flush for 15 min. (skin:) remove contamiated clothing, wash affected area w/ soap & water, (ingestion:) do not induce vomiting, inhalation: move to fresh air, if not breathing give mouth- to-mouth resuscitation, or O_2 given until toxicity resolves.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
1. remove all ignition sources
2. ventilate area of spill or leak
3. collect for reclamation or absorb in vermiculite, dry sand, earth, or similar material

Waste Disposal Method
send to licensed reclamer, permitted incinerators, or to evaporated small quantities

Precautions to Be Taken in Handling and Storing
Reasonalbe care & caution exercised. Avoid breathing vapors. Store in cool place. Concentrated vapors of this product are heavier than air & will collect in low areas. Such as pits, degreasers, storage, tanks.

Other Precautions
Do not enter areas where vapors of methylene are suspected unless special breating apparatus is used & an observer is present. Do not pressure product out of vessel or transport container w/ air.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
supplied air respirator (SAF)/SCGAF: 500ppm, gas mas w/ organis vapor (GMOV)/escape greater than 500ppm

Ventilation	Local Exhaust	Special
	yes - necessary	
	Mechanical (General)	Other

Protective Gloves	Eye Protection
required - non-penetrable	chemical safety goggles, face shield (8 inch mi

Other Protective Clothing or Equipment
clothing impervious to this materail (gloves, boots, apron or full body suit)

Work/Hygienic Practices